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F. F. SCHLIEPHACKE

3,033,612

CONTROL MEANS FOR MULTIPLE-POSITION RECLINING CHAIR

Filed Aug. 11, 1959

3 Sheets-Sheet 1

FIG. 1.

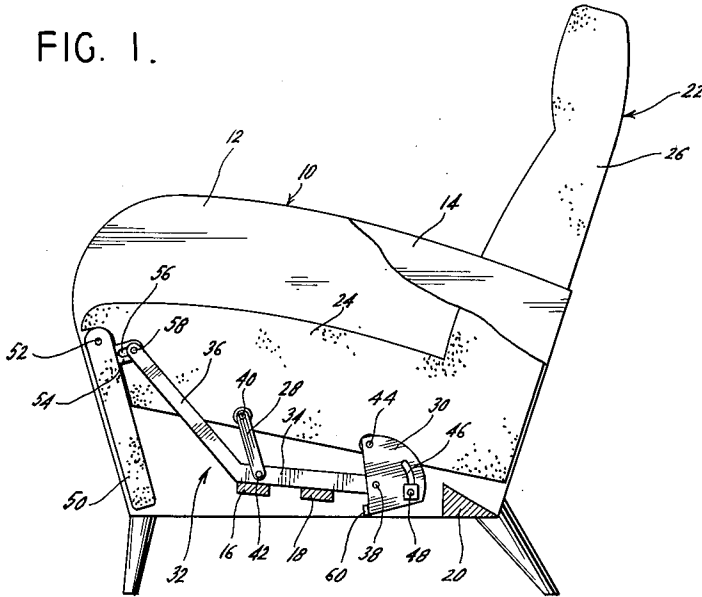
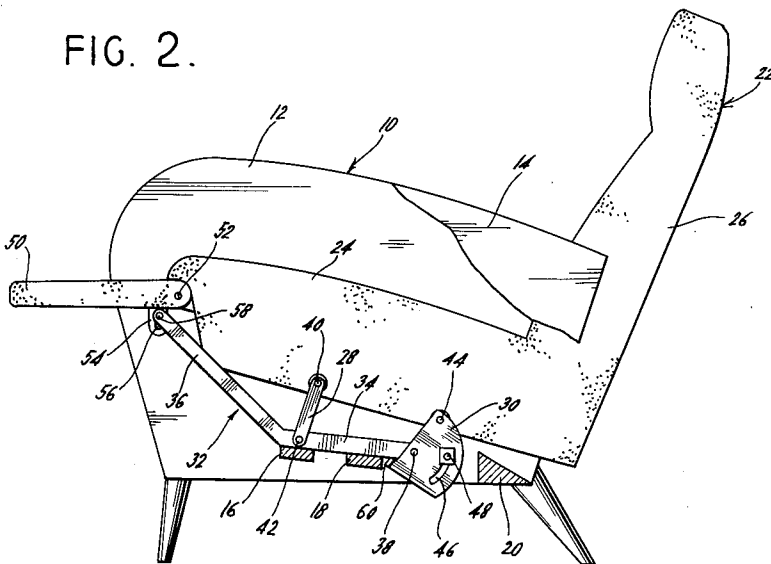


FIG. 2.



INVENTOR.
FRIDTJOF F. SCHLIEPHACKE

BY

Amster & Levy
ATTORNEYS

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F. F. SCHLIEPHACKE

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FIG. 3.

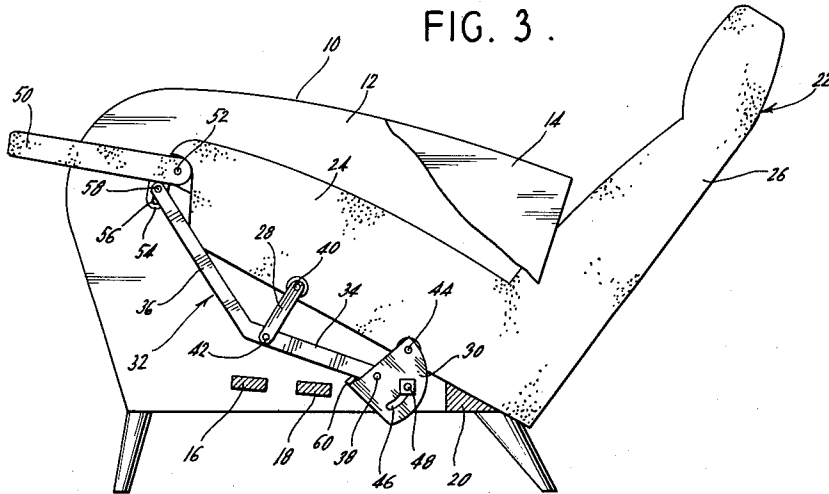
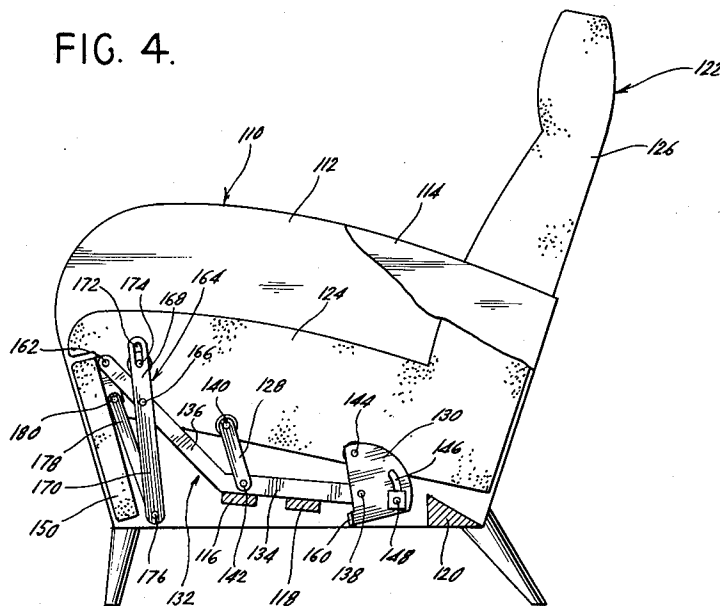


FIG. 4.



INVENTOR.
FRIDTJOF F. SCHLIEPHACKE

BY

Amster & Levy
ATTORNEYS

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FIG. 5.

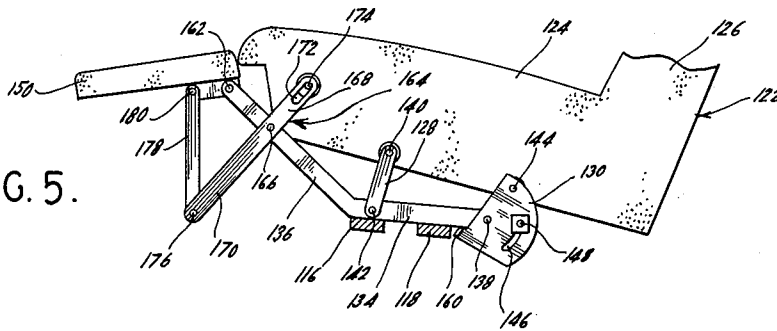


FIG. 6.

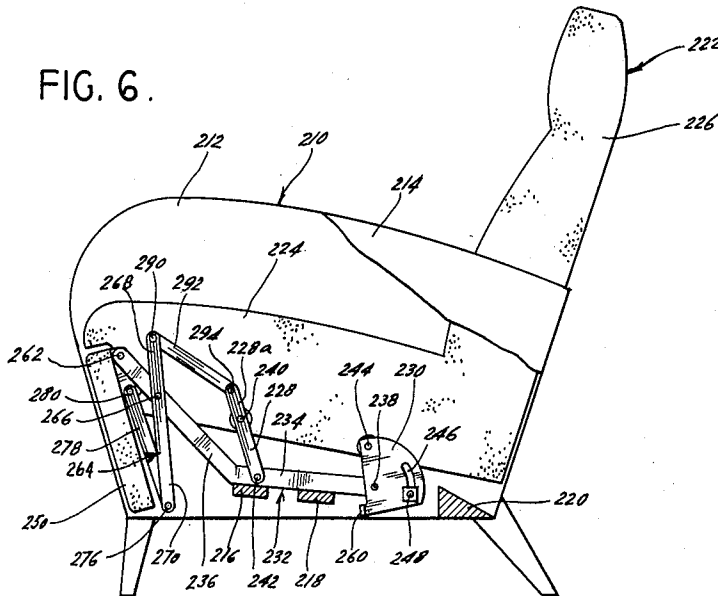
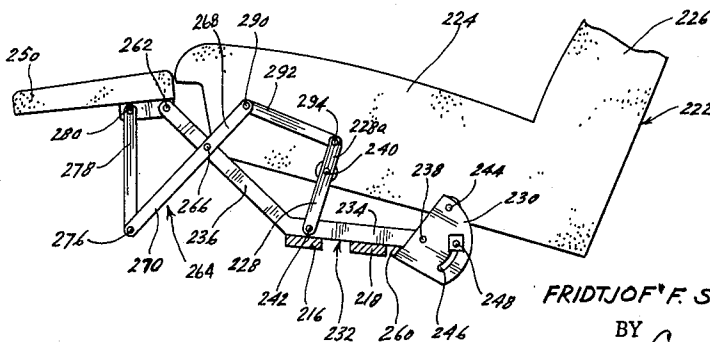


FIG. 7.



INVENTOR.

FRIDTJOF F. SCHLIEPHACKE

BY *Amster & Levy*

ATTORNEYS

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3,033,612 CONTROL MEANS FOR MULTIPLE-POSITION RECLINING CHAIR

Fridtjof F. Schliephacke, Berlin-Schmargendorf, Germany, assignor to Anton Lorenz
Filed Aug. 11, 1959, Ser. No. 833,092
6 Claims. (Cl. 297-88)

The present invention relates to improvements in reclining chairs, and in particular to a reclining chair of the "multiple position" type in which a rigid seat and back-rest unit is mounted for movement to at least two distinct body-supporting positions.

Typical of the multiple position type of chair is the so called "two-position" chair in which the seat and back-rest unit is mounted on a support frame for rearward movement through a first motion phase from a sitting position to an intermediate tilted position, and then through a second motion phase to a fully tilted position. A leg-rest is also provided and is associated with actuating means capable of moving the leg-rest from a retracted position beneath the seat to an extended, leg-supporting position forwardly of the seat in response to movement of the body-supporting unit in the first motion phase from its sitting position to its intermediate tilted position. When the body-supporting unit is then brought to its fully-tilted position, the actuating linkage is adapted to maintain the leg-rest extended to the proper level relative to the seat.

The intermediate position of the body-supporting unit is a slightly-tilted "active" sitting position with the occupant's body in a substantially upright attitude suitable for viewing television, talking, reading or the like. In such position, the leg-rest has already moved to an extended position for supporting the occupant's legs. The body-supporting unit can then, when desired, be tilted further to an inactive reclined or fully-tilted position in which the occupant's body is supported in a more supine or recumbent position for greater relaxation. In this fully-tilted position, the leg-rest is still extended in a leg-supporting position.

Two position movements of the type described above have been accomplished by the use of a carrier member or support bar mounted on the frame, with the body-supporting unit movably mounted on the carrier member for movement relative thereto during the first motion phase. The carrier member is in turn movably mounted directly on the support frame for movement relative to the frame during the second motion phase.

An object of the present invention is the provision of a two-position reclining chair in which the carrier member, carrying the body-supporting unit, has no direct fixed connection to the support frame, but rather is connected to one of the guide members which mount the body-supporting unit on said carrier member.

Another object of the present invention is the provision of a two-position chair of novel construction which produces an effective and efficient two-position movement, in which the center of rotation of the body-supporting unit shifts from the two guide members which connect the unit to the carrier member, to a single pivot which mounts the rear guide member on the support frame.

In accordance with the invention, there is provided a body-supporting unit mounted on a carrier member by a pair of guide members. The body-supporting unit is moved by the guide members relative to the carrier member during the first motion phase to the intermediate position, and the carrier member remains immovable, resting upon a portion of the support frame. At the intermediate tilted position, the guide members become rigidly

coupled to the carrier member so that they can no longer move relative to said carrier member, and the rear guide member turns about the fixed pivot on the support frame, the carrier member turning in unison with it about said fixed pivot and carrying the body-supporting unit through a second motion phase to the fully-tilted position.

Specifically, this function of the rear guide member is accomplished by lost motion means, for example, a pin-and-slot connection between the rear guide member and the support frame.

Additional objects and advantages of the invention will become apparent during the course of the following specification when taken in connection with the accompanying drawings, in which:

FIG. 1 is a side elevational view, with parts broken away and shown in section, of a reclining chair incorporating a two-position movement structure made in accordance with the invention, the chair being shown in an upright sitting position;

FIG. 2 is a side elevational view similar to FIG. 1, but showing the chair thereof in its intermediate tilted position with the leg-rest extended in its leg-supporting position;

FIG. 3 is a side elevation similar to FIG. 1, but showing the chair thereof in its fully-tilted position;

FIG. 4 is a side elevational view with parts broken away and shown in section of a reclining chair incorporating the two-position structure of the invention, but showing a modified type of leg-rest actuating means used in conjunction therewith, the chair being shown in its upright sitting position;

FIG. 5 is a partial side elevational view of the chair shown in FIG. 4, with the movable parts shown in the intermediate tilted position;

FIG. 6 is a side elevational view, with parts broken away and shown in section, of a reclining chair incorporating the two-position structure of the present invention, but shown associated with another modified type of leg-rest actuating means the chair being shown in its upright sitting position; and

FIG. 7 is a partial side elevational view of the chair shown in FIG. 6, with the movable parts illustrated in the intermediate tilted position.

Referring now specifically to the drawings and in particular to FIGS. 1-3, the reclining chair shown therein comprises a base or support frame designated generally by the reference numeral 10 and having spaced side walls 12 and 14 inter-connected by cross bars or braces 16, 18 and 20. The chair also includes a body-supporting unit, designated by the reference numeral 22, and comprising a seat 24 and a back-rest 26 formed rigidly with each other. The body-supporting unit is operatively mounted on the support frame 10 for movement relative thereto from the upright sitting position of FIG. 1 to the "active" intermediate tilted position of FIG. 2, and then to an "inactive" fully-tilted position shown in FIG. 3.

The mounting of the body-supporting unit 22 is accomplished by a pair of spaced guide members 28 and 30. The front guide member 28 is in the form of a link, while the rear guide member 30 is in the form of a plate. The guide members are mounted on a carrier member or support bar 32 and connected to the seat 24, in a manner which will be presently described.

The carrier member 32 has a rear leg 34 which is normally maintained in a horizontal position, and an upwardly inclined front leg 36. In the sitting position and intermediate tilted position of the body-supporting unit shown in FIGS. 1 and 2, the rear leg 34 rests upon the cross bars 16 and 18 and is maintained immovably in its horizontal position. The carrier member 32 has no direct fixed connection to the support frame 10, but rather

is connected to an intermediate point on the rear guide member 30 by pivot 38.

The front guide link 28 is connected at its upper end to the seat 24 by pivot 40, and at its lower end is mounted on the carrier member 32 by pivot 42. The rear guide plate 30 is connected at its upper end to a spaced point on seat 24 by pivot 44. The rear guide plate 30 has an arcuate slot 46 in which is slidably received a pin 48 affixed to the support frame 10. The pin and slot 48, 46 provides a lost motion coupling between the rear guide plate 30 and the support frame, which permits the body-supporting unit to move relative to the carrier member 32 during the first motion phase.

The chair also includes a leg-rest 50 which is mounted by pivot 52 on the forward end of the seat 24. The leg-rest 50 carries an ear 54 which contains a slot 56. A pin 58, mounted on the forward end of the carrier member front leg 36, is slidably received in said slot 56.

In the upright sitting position of the chair shown in FIG. 1, the carrier member 32 rests upon the cross bars 16 and 18 to provide a rigid support for the body-supporting unit 22. The front guide link 28 is in an upright position and slightly forwardly inclined, and the rear guide plate 30 is so positioned that the seat pivot 44 is located above and slightly forwardly of the pivotal mount 38. The fixed pin 48 is located at the lower end of the slot 46. The leg-rest 50 is in a retracted position extending downwardly beneath the forward end of the seat 24, with the pin 58 located at the rear of the slot 56.

When the occupant of the chair exerts rearward pressure against the back-rest 26, the guide members 28 and 30 turn rearwardly about the respective pivotal mounts 42 and 38 on the immovable carrier member 32 to bring the body-supporting unit 22 to its intermediate tilted position of FIG. 2. In this connection it will be noted that the front guide link 28 is slightly more forwardly inclined than the rear guide plate 30, so that the front guide link raises the forward portion of the seat 24 while the rear guide plate 30 lowers the rear portion of said seat. The body-supporting unit 22 is therefore moved rearwardly and simultaneously tilted.

During the first phase of movement to the intermediate tilted position of FIG. 2, the rear guide plate 30 pivots rearwardly and the slot 46 is slid along the fixed pivot 48. The limit of the first phase of motion is determined by engagement of the pin 48 with the upper end of the slot 46, preventing further turning movement of the guide members 28 and 30 relative to the carrier member 32. Thus, in the intermediate tilted position of FIG. 2, the body-supporting unit 22 is rigidly coupled to the carrier member 32.

As the forward end portion of the seat 20 moves upwardly and rearwardly, it carries with it the pivotal mount 52 of the leg-rest 50. The pivot 52 thus moves into vertical alignment with and then rearwardly past the pivotal connection 58 of the leg-rest with the carrier member 32, the pin-and-slot connection 58, 56 permitting this movement. The front leg 36 of the immovable carrier member 32 restrains rearward movement of the leg-rest at the slot 56. The leg-rest 50 therefore, turns about the fixed pivot 58 and is raised to its extended position of FIG. 2 wherein it is positioned to support the legs of the chair occupant, and the pin 58 moves to the forward end of the slot 56.

It will be observed that in the "active" or intermediate tilted position of FIG. 2, the body-supporting unit 22 is only slightly tilted and the occupant's body is supported in a substantially upright attitude suitable for reading, viewing television, or the like. At the same time the leg-rest 50 is fully extended and properly positioned to support the outstretched legs of the occupant.

The rear guide plate 30 carries at its forward lower end a stop member 60 which engages the lower surface of the carrier member rear leg 34 in the intermediate tilted position of FIG. 2. The stop member 60 rigidly couples the rear guide plate 30 and the carrier member

32, so that when the plate 30 turns during the second motion phase, it will carry with it the carrier member 32.

If the occupant of the chair in the intermediate tilted position of FIG. 2 wishes to assume a more reclined position for greater relaxation, he need only apply further rearward pressure against the back-rest 26, to bring the body-supporting unit 22 to the fully-tilted position of FIG. 3.

The rearward shift of the occupant's weight changes the center of gravity of the body-supporting unit and causes the carrier member 32 to turn in a clock-wise direction, as viewed in FIGS. 2 and 3, about the fixed pivot 48 which is seated at the end of slot 46. The forward end of the carrier member 32 is therefore raised relative to the support frame 10, and since the body-supporting unit 22 is now rigidly coupled to the carrier member 32, said body-supporting unit is tilted further rearwardly about the fixed pivot 48 to the fully-reclined position shown in FIG. 3. This position is determined and limited by engagement of the rear portion of the seat 24 with the rear cross bar 20. The carrier member 32, during this second phase of movement, rises from the cross bars 16 and 18.

Since the body-supporting unit 22 is rigidly coupled with the carrier member 32 by engagement of the fixed pin 48 with the end of slot 46, and by engagement of the stop member 60 with the carrier member rear leg 34, there is no relative movement of the body-supporting unit and carrier member during this second phase of movement from the intermediate tilted position of FIG. 2 to the fully-tilted position of FIG. 3. The leg-rest is therefore maintained in the extended position when the body-supporting unit arrives at the fully-tilted position.

To return from the fully-tilted position to the intermediate tilted position, it is only necessary for the occupant to shift his weight forwardly, thereby moving forward the center of gravity of the body-supporting unit and causing the latter to turn forwardly about the pivot 48 until it again reaches the intermediate tilted position of FIG. 2. To return from the intermediate tilted position to the upright sitting position, the occupant need merely apply downward pressure on the leg-rest 50, this pressure causing the body-supporting unit 22 to move forwardly on the guide members 28 and 30.

Referring now specifically to FIGS. 4 and 5, there is shown a reclining chair having similar control means for the body-supporting unit, but incorporating a modified type of leg-rest actuating structure. The chair comprises a base or support frame 110 having spaced side walls 112 and 114 inter-connected by cross bars or braces 116, 118 and 120. The chair also includes a body-supporting unit, designated generally by the numeral 122, comprising a seat 124 and a back-rest 126 formed rigidly with each other. The body-supporting unit 122 is operatively mounted on the support frame 110 for movement relative thereto from the upright sitting position of FIG. 4 to the "active" intermediate tilted position of FIG. 5 and then to an "inactive" fully-tilted position. This fully-tilted position is not shown in the drawings, but corresponds to that shown in FIG. 3 for the previous embodiment.

The body-supporting unit 122 is again mounted on a carrier member 132 by a pair of spaced guide members 128 and 130, the front guide member 128 being in the form of a link, and the rear guide member 130 being in the form of a plate.

The carrier member 132 has a rear leg 134 and an upwardly inclined front leg 136. The rear leg 134 normally rests upon the cross bars 116 and 118 and is thus maintained immovably in a horizontal position. The carrier member 132 has no direct fixed connection to the support frame 110, but rather is connected to an intermediate point on the rear guide member 130 by pivot 138.

The front guide link 128 is connected at its upper end to the seat 124 by pivot 140, and at its lower end is mounted on the carrier member rear leg 134 by pivot 142. The rear guide plate 130 is connected at its upper end to seat 124 by pivot 144, and has an arcuate slot

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146 in which is slidably received a pin 148 mounted on the support frame 110. The pin and slot 148, 146 provides a lost motion coupling between the rear guide plate 130 and the support frame, which permits the body-supporting unit to move relative to the carrier member 132 during the first motion phase.

The chair also includes a leg-rest 150 which, in this instance, is mounted by pivot 162 on the forward end of the carrier member front leg 136. The leg-rest movement is controlled by an actuating linkage comprising a double-armed lever 164 and a link 178. The lever is mounted intermediate its ends on the carrier member front leg 136 by a pivot 166. The upper arm 168 of the lever 164 has a slot 172 which slidably receives a pin 174 rigidly affixed to the seat 124. The lower arm 170 of lever 164 is connected by pivot 176 to the end of link 178. The other end of link 178 is connected by pivot 180 to a point on the leg-rest spaced from the pivot 162.

In the upright sitting position of the chair shown in FIG. 4, the carrier member 132 rests upon the cross bars 116 and 118 to provide a rigid support for the body-supporting unit 122. The front guide link 128 is in the upright position and slightly forwardly inclined, and the rear guide plate 130 is so positioned that the seat pivot 144 is located above and slightly forwardly of the pivotal mount 138. The fixed pin 148 is located at the lower end of the slot 146. The leg-rest 150 is in a retracted position extending downwardly beneath the forward end of the seat 124, with the lever 164 extending downwardly, and the pin 174 at the lower end of the slot 172.

When the occupant of the chair exerts rearward pressure against the back-rest 126, the guide members 128 and 130 turn rearwardly about the respective pivotal mounts 142 and 138 on the immovable carrier member 132, to bring the body-supporting unit 122 to its intermediate tilted position of FIG. 5. The body-supporting unit 122 is therefore moved rearwardly and simultaneously tilted.

During the first phase of movement to the intermediate tilted position of FIG. 5, the rear guide plate 130 turns rearwardly about pivot 138, and the slot 146 is slid along the fixed pivot 148 in a lost motion travel until, in the intermediate tilted position, the pin 148 engages the upper end of slot 146, preventing further turning movement of the guide members 128 and 130 relative to the carrier member 132. Thus in the intermediate tilted position of FIG. 5, the body-supporting unit 122 is rigidly coupled to the carrier member 132.

As the forward end portion of the seat 124 moves upwardly and rearwardly, it carries with it the pin 174 which, through its engagement with slot 172, draws the upper arm 168 of lever 164 rearwardly, causing lever 164 to turn about pivot 166. The lower arm 170 of said lever therefore moves upwardly and forwardly, carrying the link 178 in the same direction, and raising the leg-rest 150 to its extended, leg-supporting position of FIG. 5. The pin-and-slot coupling 172, 174 permits the seat 124 to be raised relative to the lever 164 during this leg-rest actuation, so that raising of the seat does not lift the carrier member 132 off the cross bars 116 and 118. In the intermediate tilted position of FIG. 5, the pin 174 has moved to the upper end of slot 172.

In the "active" or intermediate tilted position of FIG. 5, the body-supporting unit 122 is only slightly tilted and the occupant's body is supported in a substantially upright attitude suitable for reading, viewing television or the like. At the same time the leg-rest 150 is fully extended and properly positioned to support the outstretched legs of the occupant.

The rear guide plate 130 carries at its forward lower end a stop member 160 which engages the lower surface of the carrier member rear leg 134 in the intermediate tilted position of FIG. 5, and rigidly couples the rear guide plate 130 and the carrier member 132.

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Thus, when the plate 130 turns during the second motion phase, it carries with it the carrier member 132, and the body-supporting unit 122 which is rigidly coupled to the carrier member.

When the occupant of the chair, in the intermediate tilted position of FIG. 5, applies further rearward pressure against the back-rest 126, the body-supporting unit 122 is brought to a fully-tilted position which corresponds to the position shown for the previous embodiment in FIG. 3. The rearward shift of the occupant's weight causes the carrier member 132 to turn about a different center of rotation, that is to say about the fixed pivot 148 which is seated at the end of slot 146. The carrier member 132 is therefore raised from the cross bars 116 and 118 and the body-supporting unit 122 is carried with it and is tilted further rearwardly in a second phase of motion about the fixed pivot 148 to the fully-reclined position. The fully-reclined position is determined and limited by engagement of the rear portion of the seat 124 with the rear cross bar 120.

During the second phase of movement from the intermediate tilted position of FIG. 5 to the fully-tilted position, the body-supporting unit 122 is rigidly coupled to the carrier member 132 and there is thus no relative movement of the seat 124 and its pin 174 with the pivot 166. The lever 164 therefore does not turn about its pivotal mount 166 during this second phase of movement, and the leg-rest is maintained in the same extended position relative to the seat as it assumed in the intermediate tilted position of FIG. 5.

FIGS. 6 and 7 illustrate a similar reclining chair incorporating still another modified type of leg-rest actuating linkage, and demonstrating the further adaptability of the body-supporting unit control means to various types of leg-rest structures.

Again the chair has a support frame 210 including side walls 212 and 214 connected by cross-bars 216, 218 and 220. The rear leg 234 of the carrier member 232 normally rests upon the cross bars 216 and 218, and is connected by pivot 238 to the rear guide plate 230. The front guide link 228 is connected to the seat 224 by pivot 240 and is mounted by the pivot 242 on the carrier member 232. The rear guide plate 230 is connected to the seat 224 by pivot 244, and is connected to the support frame 210 by the pin-and-slot connection 246, 248, which provides a lost motion movement during the first motion phase.

The leg-rest 250 is mounted by pivot 262 on the carrier member front leg 236. The leg-rest 250 is actuated by a lever 264, mounted intermediate its ends by pivot 266 on the carrier member front leg 236. The lower arm 270 of lever 264 is connected by pivot 276 to a link 278, the other end of which is connected by pivot 280 to the leg-rest 250.

The lever 264, instead of being connected to the seat, is in this instance driven by an extension 228a of front guide link 228, which projects upwardly beyond the pivot 240. The extension 228a is connected by a pivot 294 to one end of a control link 292, the other end of which is connected by pivot 290 to the upper arm 268 of lever 264.

The movement of the body-supporting unit 222 to each of its two tilted positions, has already been described in detail in connection with the previous embodiments. In the first motion phase, the body-supporting unit 222 is moved relative to the stationary carrier member 232 by the guide members 228 and 230, until such movement is halted by engagement of the pin 248 with the upper end of slot 246, and engagement of the stop member 260 with the carrier member rear leg 234.

During the first phase of motion, the front guide link 228 turns rearwardly about its pivotal mount 242 on the carrier member 232, and its upper extension 228a draws the control link 292 rearwardly, causing the lever

264 to turn about its pivotal mount 265. The leg-rest 250 is therefore raised to its extended, leg-supporting position of FIG. 6 by the lower arm 270 of lever 264 through the link 278.

In the second phase of motion, the rear guide plate 230 turns about the fixed pivot 248 which is seated on the upper end of slot 246, carrying the carrier member 232, the body-supporting unit 222, and the leg-rest structure as an integral unit about the fixed pivot 248 to the fully-tilted position corresponding to that shown in FIG. 3. Since there is no relative movement between the seat 224 and the carrier member 232 during this second motion phase, the front guide link 228 remains stationary and the leg-rest 250 is maintained in the extended, leg-supporting position.

While preferred embodiments of the invention have been shown and described herein, it is obvious that numerous additions, changes and omissions may be made therein without departing from the spirit and scope of the invention.

What I claim is:

1. A multiple position reclining chair comprising a support frame, a body-supporting unit including a seat and backrest formed rigidly with each other, and means mounting the body-supporting unit on the support frame for movement through a first phase of motion from an upright sitting position to an intermediate tilted position and a second motion phase from said intermediate tilted position to a fully-tilted position, said mounting means including a carrier member, a front guide member and a rear guide member mounting the body-supporting unit on the carrier member, and lost motion means connecting the rear guide member to the support frame, said carrier member resting in a stationary position upon a fixed portion of the support frame in the sitting position of the body-supporting unit, the front and rear guide members turning rearwardly on the stationary carrier member during the first motion phase to move the body-supporting unit rearwardly relative to the carrier member to said intermediate tilted position, said lost motion means engaging the rear guide members at the intermediate tilted position to limit the first motion phase and providing a fixed pivot mounting the rear guide member on the support frame for tilting movement of the rear guide member thereabout, and blocking means rigidly coupling at least one of said guide members and carrier member at the intermediate tilted position for simultaneous movement of said rear guide member, body-supporting unit and carrier member as a rigid unit about said fixed pivotal mount provided by said rear guide member during the second motion phase.

2. A multiple position reclining chair comprising a support frame, a body-supporting unit including a seat and backrest formed rigidly with each other, and means mounting the body-supporting unit on the support frame for rearward movement through a first phase of motion from an upright sitting position to an intermediate tilted position and through a second motion phase from said intermediate tilted position to a fully tilted position, said mounting means including a carrier member normally resting upon a fixed portion of said support frame, a front guide member and a rear guide member mounting the body-supporting unit on the carrier member, the front and rear guide members being pivotally mounted at spaced points on the carrier member and pivotally connected to spaced points on the seat, the front and rear guide members turning rearwardly on the carrier member during the first motion phase to move the body-supporting unit rearwardly relative to the carrier member to said intermediate tilted position, a fixed pivot on the support frame engaging a portion of the rear guide member at the intermediate tilted position to halt further movement of said guide members relative to the carrier member and to form a pivotal mount for said rear guide member for tilting movement of the rear guide member

thereabout during the second motion phase, and means rigidly coupling the rear guide member with the carrier member at the end of said first motion phase whereby the rear guide member, carrier member and body-supporting unit turn simultaneously as a rigid unit about the fixed pivotal mount of the rear guide member during the second motion phase.

3. A multiple position reclining chair comprising a support frame, a body-supporting unit including a rigid seat and backrest adapted to be mounted for movement from a sitting position through a first motion phase to an intermediate tilted position and through a second motion phase from said intermediate tilted position to a fully-tilted position, a carrier member, means for releasably supporting the carrier member in a stationary position relative to said support frame during said first motion phase, front guiding means operatively connected between said carrier member and said seat, a rear guiding member having a pivotal mount on said carrier member and a pivotal connection to said seat, the portion of said rear guiding member intermediate said pivotal mount and said pivotal connection serving as a rear guiding link for said body-supporting unit during said first motion phase, lost motion means operatively connecting said rear guiding member and said support frame and including a stationary pivotal mount on said support, said rear guiding member moving through a lost motion travel during said first motion phase and completing said lost motion travel at the end of said first motion phase with said stationary pivotal mount engaging said rear guide member and serving as a center of rotation for said rear guiding member during said second motion phase, and means operative at the end of the first motion phase to rigidly couple said rear guiding member with said carrier member during said second motion phase, whereby said carrier member and said rear guiding member turn as a unit about the stationary pivotal mount of said lost motion means.

4. A multiple position reclining chair comprising a support frame, a body-supporting unit including a seat and backrest formed rigidly with each other, and means mounting the body-supporting unit on the support frame for movement through a first phase of motion from an upright sitting position to an intermediate tilted position and through a second phase of motion from said intermediate tilted position to a fully-tilted position, said mounting means including a carrier member, a front guide member and a rear guide member mounting the body-supporting unit on the carrier member, and a pin-and-slot connection coupling the rear guide member with the support frame, fixed means on the support frame normally supporting the carrier member in a stationary position, the front and rear guide members turning rearwardly on the stationary carrier member during the first motion phase to move the body-supporting unit rearwardly relative to the carrier member to said intermediate tilted position, means rigidly coupling the guide members with the carrier member at the end of the first motion phase, the pin-and-slot connection then providing a fixed pivot mounting the rear guide member on the support frame for turning movement of the rear guide member, body-supporting unit and carrier member as a rigid unit about said pivotal mount provided by said rear guide member during the second motion phase.

5. A multiple position reclining chair comprising a support frame, a body-supporting unit including a seat and backrest formed rigidly with each other, and means mounting the body-supporting unit on the support frame for movement through a first phase of motion from an upright sitting position to an intermediate tilted position, said mounting means including a carrier member, a front guide member and a rear guide member pivotally mounted at spaced points on the carrier member and pivotally connected at spaced points to the seat, a fixed pin on the support frame, said rear guide member having a slot engaging said pin, fixed means on the support frame nor-

mally supporting the carrier member in a stationary position, the front and rear guide members turning rearwardly about their pivotal mounts on the carrier member during the first motion phase to move the body-supporting unit rearwardly relative to the carrier member to said intermediate tilted position, and blocking means for limiting further rearward movement of the guide means on the carrier member at the end of said first motion phase, whereby to rigidly coupled the body-supporting unit and carrier member, the fixed pin engaging an end of the slot at the end of said first motion phase and seating thereon to form a fixed pivotal mount for the rear guide member thereafter for turning movement of the rear guide member, body-supporting unit and carrier member as a rigid unit about said fixed pivotal mount during the second motion phase.

6. A multiple position reclining chair according to claim 5 in which said blocking means comprises a stop member mounted on said rear guide member and positioned to engage the lower surface of the carrier member at the end of the first motion phase.

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